**Premarket Notification** 

3D Line: EVTOOL

Date: 20 October 2001

KO13535

JAN 1 8 2002



Date: October 20, 2001

3D Line USA

2807 Old Court Rd

Baltimore MD 21208

Phone: 410-580-1730

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Department of Health and Human Services Center of Devices and Radiological Health Office of Device Evaluation Pre-Market Notification section

# 510(K) SUMMARY OF SAFETY AND EFFECTIVENESS INFORMATION

as required by section 807.92(c)

### a. Submitter of 510(k)

Company name:

3D Line USA

Registration #

9041925

Address:

2807 Old Court Road

Baltimore, MD 21208

Contact Person:

Karen Rigamonti

President

Phone:

410-580-1730

Fax:

410-580-1732

### b. Device Name:

Trade/Proprietary Name:

**EVTOOL** 

Common/Usual Name:

Radiation Therapy Planning System

Classification Name:

Accelerator, Linear, Medical, Accessory

21 CFR 892.5050 Class II.

## c. Legally Marketed Predicate Device(s)

Our device is substantially equivalent to the legally marketed predicate devices cited in the table below.

Manufacturer	Device	510(k) #
3D Line	DMLC IV-ERGO	K001163

### d. Description

EVTOOL is a software module that has been designed to expand the features and functions of the DMLC IV- ERGO treatment planning software. The software runs on a silicon graphics workstation and Irix operating system.

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EVTOOL software is used for comparing and evaluating radiation therapy treatment plans from a quantitative and radiobiological point of view. The software displays one or more stored plans for comparison and analysis. It can display the dose volume histograms of the various plans and organ dose statistics (mean, modal, maximum and minimum dose). It allows the user to input radiobiological corrections in order to enhance the evaluation of the treatment plan. It also optimizes the dose prescription by displaying reference dose and number of treatment fractions.

EVTOOL is fully integrated into the ERGO treatment planning environment in order to easily exchange information from the patients' database. The patient information is selected and automatically loaded into the EVTOOL software. From the patient database the user can select one or multiple treatment plans to display and calculate the dose statistics, including dose volume histograms and radiobiological models. The analytical information is displayed in 4 windows with a zoom capability. These windows can display the overall plan and individual organs of interest. EVTOOL provides options for incorporating radiobiological corrections to assist the physician in determining the optimal dose prescription and fractionation based on TCP (Tumor Control Probability), NTCP (Normal Tissue Complication Probability) and UTCP (Uncomplicated Tumor Control Probability) values.

This software is a useful tool in evaluating the entire volumetric treatment plan, it is not used to directly treat the patient. It provides the physician with a tool to compare various plan versions side by side in order to determine the most appropriate treatment plan to be used with the DMLC IV equipment. The display of the treatment plans within EVTOOL provides a permanent record and effective control on the actual dose delivered to the patient.

#### Intended use e.

EVTOOL software module provides the ability to compare and evaluate the radiation dose delivery to the tumor volume and surrounding organs from generated dose volume histograms and radiobiological values. It expands the DMLC IV-ERGO system, which is a combination of a radiation collimator with multiple tungsten leaves that move during delivery of radiation therapy and a computer based treatment planning and control system.

#### Summary of technological considerations f.

The EVTOOL software is substantially equivalent to the predicate devices. It enhances the functionality of the defined predicate device to provide evaluation tools for radiation therapy treatment planning.

Keren Regamente Name: Karen Rigamonti, MD, MBA, M.P.H.

Title President 3D Line USA, Inc.

Baltimore, MD



Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

# JAN 1 8 2002

Karen Rigamonti, M.D. President 3D Line USA, Inc. 2807 Old Court Road BALTIMORE MD 21208 Re: K013535

Trade/Device Name: EVTOOL Model V 1.0

Accessory to RTP System

Regulation Number: 21 CFR 892.5050

Regulation Name: Medical charged-particle radiation

therapy system

Regulatory Class: II Product Code: 90 MUJ Dated: October 20, 2001 Received: October 23, 2001

### Dear Dr. Rigamonti:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at one of the following numbers, based on the regulation number at the top of this letter:

8xx.1xxx	(301) 594-4591
876.2xxx, 3xxx, 4xxx, 5xxx	(301) 594-4616
884.2xxx, 3xxx, 4xxx, 5xxx, 6xxx	(301) 594-4616
892.2xxx, 3xxx, 4xxx, 5xxx	(301) 594-4654
Other	(301) 594-4692

Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <a href="http://www.fda.gov/cdrh/dsma/dsmamain.html">http://www.fda.gov/cdrh/dsma/dsmamain.html</a>.

Sincerely yours,

Vancy C. Brogdon

Director, Division of Reproductive, Abdominal, and Radiological Devices

Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure

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### Statement of Intended Use

**Device Name:** 

**EVTOOL** 

### Intended use

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# Prescription use

The EVTOOL is intended to be used for medical procedures on patients to be prescribed and performed by a suitably trained and certified medical professional.

Name: Karen Rigamonti, MD, MBA, M.P.H.

Date

Title: President > 3D Line USA, Inc. Baltimore, MD

(Division Sign-O)
Division of Repres

and Radiological Devices

510(k) Number

K013535

Prescription Use\_